

IMPROVED FRAGMENT ELIMINATION

Abstract of the Disclosure

A database is fragmented into a plurality of database fragments using a plurality of fragmentation expressions. Each fragmentation expression corresponds to a database fragment and includes a boolean combination of one or more comparison-predicates. Each comparison-predicate defines a range of a fragmentation dimension basis function of one or more database fields. A database query is processed against the database by: (i) resolving a data selection expression of the database query into a boolean combination of fragment selection comparison-predicates each defining a range of one of the fragmentation dimension basis functions; (ii) identifying one or more eliminated database fragments based on the boolean combination of fragment selection comparison-predicates and the fragmentation scheme; and (iii) processing the database query against database fragments other than the eliminated database fragments.